



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 6, 2016

Luz G. Chan  
Registration Manager  
Drexel Chemical Company  
PO Box 13327  
Memphis, TN 38113

Subject: Notification per PRN 98-10 – Change of Primary Brand Name  
Product Name: DREXEL DICAMBA 2,4-DE-AMINE  
EPA Registration Number: 19713-678  
Application Date: 4/28/2016  
Decision Number: 516852

Dear Ms. Chan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records. The primary brand name DREXEL DICAMBA 2,4-DE-AMINE has been added to the product record.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact Sarah Meadows at 703-347-0505 or via email at meadows.sarah@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Kathryn V. Montague".

Kathryn Montague, Product Manager 23  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

**NOTIFICATION**

19713-678

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

05/06/2016

**GROUP 4 HERBICIDES**



**Dicamba 2,4 De-Amine™**  
Herbicide

For use on Conservation Reserve Program Land, Fallow Systems (Between Crop Applications), General Farmstead, Sorghum, Grass (Hay or Silage), Pastures, Rangeland, Sugarcane and Wheat

**ACTIVE INGREDIENTS\*:**

Dimethylamine salt of Dicamba (3,6-dichloro-o-anisic acid)..... 12.4%  
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid\*\*..... 35.7%

**OTHER INGREDIENTS:**..... 51.9%

**TOTAL:**..... 100.0%

\* This product contains 10.3% Dicamba or 1 pound per gallon (120 grams per liter) and 29.6% 2,4-D or 2.87 pounds per gallon (344 grams per liter).

\*\* Isomer specific by AOAC method 978.05, 15th Edition.

**KEEP OUT OF REACH OF CHILDREN  
DANGER / PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**See FIRST AID Below**

**Shake Well Before Using (Recirculate Contents Before Use)**

EPA Reg. No. 19713-678  
EPA Est. No. 19713-XX-X

Net Content: \_\_\_\_\_ (Gals) ( \_\_\_\_\_ L)

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	
<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>	
<b>IF SWALLOWED:</b>	
<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>	
<b>IF ON SKIN OR CLOTHING:</b>	
<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>	
<b>IF INHALED:</b>	
<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency.	

678SP-0416\*

## PRECAUTIONARY STATEMENTS

### Hazards To Humans And Domestic Animals

**DANGER:** Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin. Avoid breathing spray mist.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are any waterproof material.

**All mixers, loaders, applicators, flaggers and other handlers must wear:** Long-sleeved shirt and long pants, shoes and socks, chemical-resistant gloves, protective eyewear (goggles or face shield) and • chemical-resistant apron when mixing or loading, cleaning up spills or equipment or otherwise exposed to the concentrate. See “ENGINEERING CONTROLS” for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not re-use them.

Follow the manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

### ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit which meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

## USER SAFETY RECOMMENDATIONS

**Users should:** 1) Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Drift or runoff may adversely affect non-target plants. Do not contaminate water when disposing of equipment washwaters or rinsate.

This has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Precaution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), and Restricted Entry Interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of **48 hours**. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls worn over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and protective eyewear.

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

### **PRODUCT INFORMATION**

**DICAMBA 2,4 DE-AMINE** herbicide is a selective post-emergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in grass forages and selected row crops.

#### **Mode of Action**

This product contains two active ingredients: Dicamba and 2,4-D. This product is readily absorbed by plants through shoot and root uptake and translocates throughout the plant's system and accumulates in areas of active growth. This product interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

#### **CLEANING SPRAY EQUIPMENT**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and then triple rinse the equipment before and after applying this product.

#### **SPRAY DRIFT MANAGEMENT**

A variety of factors including weather conditions (e.g., wind directions, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

When applying sprays that contain 2,4-D as the sole active ingredient or when applying sprays that contain 2,4-D mixed with active ingredients that require a coarse or coarser spray, apply only as a coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### **Wind Speed**

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but limited to, residential areas, bodies of water, known habitat for non-target species, non-target crops) within 250 feet downwind. If applying a medium spray, leave one swath unsprayed at the downwind edge of the treated field.

### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

### **Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. This product may cause injury to desirable trees and plants when contacting their roots, stem or foliage. Susceptible crops include, but are not limited to, Cotton, Okra, Flowers, Grapes (in growing stage), Fruit trees (foliage), Soybeans (vegetative stage), Ornamentals, Sunflowers, Tomatoes, Beans, Peas, Potatoes and other Vegetables, and Tobacco. These plants are most sensitive to this product during their development or growing stage. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if it is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops or if a temperature inversion exists. However, always make applications when there is some air movement to determine the direction and distance of possible spray drift. Coarse sprays are less likely to drift out of the target area than fine sprays. Agriculturally approved drift reducing additives may be used.

Do not use aerial equipment to apply this product when sensitive crops and plants are growing in the vicinity of the area to be treated.

### **Other State and Local Requirements**

Applicators must follow all state and local pesticide drift requirements regarding applications of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

### **Equipment**

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

#### **For Aerial Application:**

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

#### **For Ground Boom Application:**

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

## **APPLICATION INSTRUCTIONS**

Apply this product at the rates and growth stages listed in **Tables 1 and 2** unless instructed differently by “*FOOD/FEED CROP SPECIFIC INFORMATION*” or “*NON-FOOD/FEED USE*” sections. Applications can be made to actively growing weeds as aerial, broadcast, band, or spot spray applications. This product may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in pre-plant or pre-emergence uses for all crops listed on this label. Post-emergence uses with sprayable fluid fertilizer may be made on Pasture, Hayland or Wheat crops only. The most effective application rate and timing varies based on the target weed species (refer to **Table 1**). In mixed populations of weeds, the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control.

Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of this product with the roots of desirable plants such as trees and shrubs.

### **Irrigation**

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

### **Spray Coverage**

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

### **Aerial Application Methods and Equipment**

**Water Volume:** Use 3 to 10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Make applications at the lowest safe height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use precautions to avoid drift hazards, including those found in this labeling (see “*SPRAY DRIFT MANAGEMENT*” section for specific requirements), as well as applicable state and local regulations and ordinances. Do not use aerial equipment if spray particles of this product can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

### **Ground Application (Banding)**

When applying this product by banding, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast rate} = \text{Banding herbicide per acre rate per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast} = \text{Banding water volume per acre volume per acre}$$

### **Ground Application (Broadcast)**

**Water Volume:** Use 5 to 40 gallons of spray solution per acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage. The applicator must follow the most restrictive use precautions to avoid drift hazards, including those found in this labeling (see “*SPRAY DRIFT MANAGEMENT*” section for specific requirements) as well as applicable state and local regulations and ordinances.

**Table 1. Application Rate and Timing — Annual Weeds**

Weeds Controlled (including ALS and triazine resistant)	Rate of This Product Per Acre (According to Weed Growth Stage)					
	0.5 pint	1 pint	1.5 pints	2 pints	3 pints	4 pints
Beebalm, Spotted	-	-	-	Pre-bloom	Post-bloom	-
Broomweed	1 to 3"	3" branching	-	Branching	-	After branching
Buckwheat, Wild	-	1 to 6"	-	-	-	-
Buffalo bur	-	-	-	1 to 6"	-	After flowering
Burdock	-	Pre-flower	-	-	-	-
Butter cup	-	Pre-flower	-	Early bloom	Late bloom	-
Chickweed, Common	-	Seedling	1 to 3"	-	-	-
Cockle, Cow	-	< 3"	-	-	-	-
Cocklebur, Common	-	1 to 6"	6 to 12"	12 to 18"	-	-
Coreopsis, Plain	-	1 to 6"	-	-	-	-
Croton, Woolly	1 to 4"	4 to 12"	12 to 30"	-	-	-
Devils claw	-	-	-	< 8"	--	-
Dogfennel	-	-	-	10 to 15"	-	-
Evening primrose	-	< 2"	-	2 to 6"	-	-
Flax	-	< 2"	-	-	-	-
Fleabane, Annual	-	1 to 4"	4 to 8"	8"	-	-
Flixweed	-	< 3"	-	-	-	-
Henbit	-	-	Pre-flower	-	Flower	-
Knotweed spp.	-	< 3" runners	-	> 3" runners	-	Actively growing
Kochia	-	1 to 6"	6 to 10"	10 to 20"	-	Actively growing
Lambsquarters, Common	-	1 to 6"	6 to 10"	10 to 20"	-	Actively growing
Mallow, Common	-	< 3"	-	-	-	-
Morningglory, Ivyleaf	-	Pre-flower	-	-	-	-
Morningglory, Tall	-	Pre-flower	-	Post-flower	-	-
Mustards, Annual	-	Rosette	-	Early bolt	-	-
Mustards, Tansy	-	< 3"	-	-	-	-
Pennycress, Field	-	-	-	Rosette	-	-
Pepperweed, Virginia	-	-	1 to 3"	3 to 6"	After branching	-
Pigweed, Prostate	-	< 3"	-	-	-	-
Pigweed, Redroot	-	< 3"	3 to 10"	-	-	-
Pigweed, Smooth	-	< 3"	-	-	-	-
Pigweed, Tumble	-	< 3"	-	Mature	-	-
Poorjoe	-	Prior to flower	-	-	-	Actively growing
Purslane, Common	-	< 3"	3 to 8"	-	-	-
Ragweed, Common	-	-	-	> 10"	-	-
Western, Lanceleaf	1 to 3"	3 to 6"	6 to 10"	Actively growing	-	-
Sedge*	-	-	-	-	-	-
Shepherdspurse	-	Rosette	-	-	-	-
Smartweed, Pennsylvania	-	4"	-	-	4 to 12"	-
Sneezeweed, Bitter	-	1 to 4"	Prior to flower	Flower	-	-
Sowthistle	-	Rosette	-	Bolting	-	-
Sunflower	-	1 to 3"	3 to 6"	6 to 24"	-	-
Thistle, Russian	-	-	-	Rosette	-	-
Velvetleaf	-	< 6"	6 to 20"	> 20"	-	-

\*For use in Nonfood/Feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

**Table 2. Application Rate and Timing — Biennial and Perennial Weeds**

Weeds Controlled	Rate of This Product Per Acre (According to Weed Growth Stage)					
	0.5 pint	1 pint	1.5 pints	2 pints	3 pints	4 to 6 pints
Bindweed, Field	-	-	-	-	-	Actively growing
Bittercress	-	2 to 3"	-	-	-	-
Buckeye species <sup>1</sup>	-	-	-	-	Full leaf	-
Bullnettle <sup>2</sup>	-	-	-	Flower	-	-
Chicory	-	-	-	-	Early bolting	-
Clover, Bur	-	-	Pre-flower	-	-	-
Dandelion, Common	-	Rosette	-	Bolting	-	-
Dewberry, Southern <sup>1</sup>	-	-	-	-	-	Spring or fall
Dock, Curly	-	-	Prior to bolting	-	After bolting	-
Elderberry <sup>2</sup>	-	-	-	-	-	Actively growing
Goldenrod, Missouri	-	-	-	3 to 15"	Flower	-
Goldenweed, Common	-	-	-	-	-	Actively growing
Groundsel Texas	-	Rosette	Post-bolting	-	-	-
Honeysuckle, Hairy	-	-	-	-	Spring or Fall	-
Horsenettle, Carolina <sup>1</sup>	-	-	-	-	-	Flower or berry
Ivy, Poison	-	-	-	After bloom	-	-
Knapweed, Black <sup>2</sup>	-	-	-	-	-	Actively growing
Knapweed, Russian <sup>2</sup>	-	-	-	-	-	Actively growing
Knapweed, Spotted	-	-	-	-	-	Actively growing
Marshelder	-	-	-	< 12"	<12" Pre-bloom	-
Mesquite	-	-	-	-	-	45 to 90 days after bud break
Milkweed antelopehorn <sup>1</sup>	-	-	-	Pre-flower	-	Flower
Nightshade, Silverleaf <sup>1</sup>	-	-	-	Full flower	-	-
Nightshade, Black <sup>1</sup>	-	-	-	Full flower	-	Actively growing
Persimmon, Eastern <sup>3</sup>	-	-	-	-	-	Actively growing
Prickly lettuce	-	-	-	Rosette	-	Actively growing
Rabbitbrush <sup>2</sup>	-	-	-	-	-	-
Ragwort, Tansy	-	-	-	Rosette	-	Actively growing
Redvine <sup>2</sup>	-	-	-	-	-	Actively growing
Sagebrush, Fringed <sup>2</sup>	-	-	-	-	-	Actively growing
Smartweed	-	-	-	-	-	-
Sorrel, Red	-	-	Rosette	Bolting	Flower	Actively growing
Sowthistle <sup>2</sup>	-	-	-	-	-	Actively growing
Spurge, Leafy <sup>2</sup>	-	-	-	-	-	Full leaf
Tallow tree, Chinese <sup>4</sup>	-	-	-	-	-	-
Thistle, Bull	-	-	Rosette	Bolting	-	Actively growing
Thistle, Canada <sup>2</sup>	-	-	-	-	-	-
Thistle, Musk	-	-	-	Rosette/ Bolting	-	-
Thistle, Plumless	-	-	Rosette	Bolting	-	-
Vetch, Hairy	-	1 to 4"	4 to 8"	8" Full flower	-	-
Yankeeweed	-	-	-	10 to 18"	-	-
Yellow starthistle <sup>1</sup>	-	-	-	-	-	-

<sup>1</sup> May require repeat applications.

<sup>2</sup> Specified rate will provide top growth suppression only.

<sup>3</sup> For improved root kill or woody species such as Mesquite and Eastern persimmon, spray 4 pints of this product per acre each year for 3 consecutive years. For increased control of weeds such as Blackberry and Dewberry, this product may be tank-mixed with Ally® herbicide (0.1 to 0.2 oz. per acre), if labeled for the use site.

<sup>4</sup> Under dense populations, a second application may be needed for the following growing season.

### Spot or Small Area Application

This product may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack, or other small capacity sprayers, prepare a solution of this product in water according to **Table 3** (assuming that the spot treatment rate equates to 60 gallons per acre on the broadcast basis.) Adding a surfactant (0.5% by volume) can help improve control. For example, 5 gallons (40 pts. or 640 fl. ozs.) of herbicide solution would require 0.2 pint (3.2 fl. oz.) of surfactant.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

**Table 3. Knapsack Sprayer Dilution Instructions**

Sprayer Capacity (Gals. of Water)	Amount of This Product to Add to the Spray Tank
1 gal.	1 fl. oz.*
3 gals.	3 fl. ozs.
5 gals.	5 fl. ozs.
*1 fl. oz. = 2 tbsp.	

### ADDITIVES

To improve burn down of emerged weeds, surfactants and/or low use rate of liquid fertilizers (28-0-0, 32-0-0), or crop oil concentrate may be used with this product or tank-mixes after the weeds have emerged. Crop oil concentrate is for non-food/feed purposes only. Do not apply tank-mixes that include ammonium sulfate or crop oil concentrate to any food/feed crop use listed on this label. For food/feed crop uses, do not use liquid fertilizers that contain ammonium sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances. Consult your local representative for recommendations for your area. For additional information, see compatibility test for mix components.

### Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- Be non-phytotoxic.
- Contains only EPA exempt ingredients.
- Provide good mixing quality in the jar test, and
- Be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see compatibility test for mix components.

Adjuvants containing crop oil concentrates may be used for pre-plant, pre-emergence and between cropping applications. Do not use crop oil concentrate for post-emergence applications in food/feed crops (i.e., Sorghum, Grass (hay or silage), Pastures, Rangeland, Sugarcane and Wheat).

### Nitrogen Source

- Sprayable liquid fertilizers: Use one quart of sprayable liquid fertilizers (28-0-0, 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

### Non-ionic Surfactant

The standard label recommendation is 2 to 4 pints of an 80% active non-ionic spray surfactant per 100 gallons of water. For certain weeds, use a higher spray surfactant rate.

**Table 4. Additive Rate Per Acre**

Additive	Rate Per Acre
Non-ionic surfactant	2 to 4 pints per 100 gallons
Sprayable liquid fertilizer (28-0-0, 32-0-0)	2 to 4 quarts
Crop Oil Concentrate	1 quart*
*See manufacturer's label for specific rate directions.	

**TANK-MIXING INFORMATION****Tank-Mix Partners/Components**

The following products may be tank-mixed with this product according to the specific tank-mixing instructions in this label and respective product labels.

- Aim (Carfentrazone-ethyl)
- Ally (Metsulfuron-methyl)
- Amber (Triasulfuron)
- Asulox (Asulam)
- Products containing Atrazine
- Banvel (Dicamba)
- Basagran (Bentazon)
- Bronate (Bromoxynil + MCPA)
- Buctril (Bromoxynil)
- Canvas (Thifensulfuron + Metsulfuron + Tribenuron)
- Clarity (Dicamba)
- Curtail (Clorpyralid + 2,4-D)
- Cyclone (Paraquat)
- Products containing 2,4-D
- Dakota (Fenoxaprop-p-ethyl + MCPA)
- Distinct (Diflufenzopyr)
- Evik (Ametryn)
- Express (Thifensulfuron + Tribenuron-methyl)
- Fallowmaster (Glyphosate + Dicamba)
- Finesse (Chlorsulfuron + Metsulfuron-methyl)
- Glean (Chlorsulfuron)
- Gramoxone (Paraquat)
- Harmony Extra (Thifensulfuron + Tribenuron-methyl)
- Karmex (Diuron)
- Kerb (pronamide)
- Laddok S-12 (Bentazon + Atrazine)
- Landmaster (Glyphosate + 2,4-D)
- Lexone (Metribuzin)
- Products containing MCPA
- Paramount (Quinclorac)
- Peak (Prosulfuron)
- Permit (Halosulfuron-methyl)
- Rave (Dicamba + Triasulfuron)
- Roundup Ultra (Glyphosate)
- Sencor (Metribuzin)
- Sinbar (Terbacil)
- Stinger (Clopyralid)
- Tiller (Fenoxaprop-p-ethyl + 2,4-D + MCPA)
- Tordon (Picloram)
- Touchdown (Glyphosate)

See “*FOOD/FEED CROP-SPECIFIC INFORMATION*” section for more details. Read and follow the applicable “*RESTRICTIONS AND LIMITATIONS*” and “*DIRECTIONS FOR USE*” on all products involved in tank-mixing. The most restrictive labeling applies to tank-mixes.

**It is the pesticide user’s responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.**

Physical incompatibility, reduced weed control or crop injury may result from mixing this product with other pesticides (fungicides, herbicides, insecticides or miticides), additives or fertilizers. Manufacturer does not recommend using tank-mixes other than those listed above on this labeling. Local agricultural authorities may be a source of information when using other than the Manufacturer recommended tank-mixes. Add components in the sequence indicated in the “*Mixing Order*” using 2 teaspoons for each pound or 1 teaspoon for each pint of label specified rate per acre. Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

### **Mixing Order**

If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

- 1) **Water\*** – Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) **Agitation** – Maintain constant agitation throughout mixing and application.
- 3) **Products in PVA bags** – Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates or suspo-emulsions).
- 5) **Water-soluble products** (such as this product).
- 6) **Emulsifiable concentrates** (such as oil concentrate when applicable).
- 7) **Water-soluble additives** [such as liquid fertilizers (28-0-0, 32-0-0) when applicable].
- 8) **Remaining quantity of water.**

\*If sprayable fluid fertilizer is used as the carrier, this product must be diluted with a minimum of 5 parts water to 1 part this product. Then add 0.25 to 0.5% volume/volume of a non-ionic surfactant to the dilution before adding it to the sprayable fluid fertilizer to reduce the concern for compatibility problems with this mix. Always perform the compatibility test before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

### **RESTRICTIONS AND LIMITATIONS**

- Maximum seasonal use rate: Refer to **Table 5**.
- Pre-harvest Interval (PHI): Refer to “*FOOD/FEED CROP-SPECIFIC INFORMATION*” section.

#### **Crop-Specific Information:**

- Restricted Entry Interval (REI): 48 hours

#### **Crop Rotational Restrictions:**

The interval between application and planting rotational crops is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

**–Planting/replanting restrictions for applications of 5.6 pints per acre or less of this product:** No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label

including Sorghum, follow the pre-plant use directions in the “*FOOD/FEED CROP-SPECIFIC INFORMATION*” section.

For Barley, Oat, Wheat and other grass seedlings, the interval between application and planting is 10 days per pint per acre.

**–Planting/replanting restrictions for applications of more than 5.6 pints and up to 8 pints of this product per acre:** Corn, Sorghum, Cotton (east of the Rocky Mountains) and all other crops grown in areas with 30 inches or more of annual rainfall may be planted 120 days or more after application. Barley, Oat, Wheat, and other grass seedlings, may be planted if the interval from application to planting is 10 days per pint per acre east of the Mississippi River and 15 days per pint per acre west of the Mississippi River. For all other crops in areas with less than 30 inches of annual rainfall, the interval between application and planting is 180 days or more.

- **Rainfast period:** Rainfall or irrigation occurring within 4 hours after post-emergence applications may reduce the effectiveness of this product.
- **Stress:** Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury or widely fluctuating temperatures, as unsatisfactory control may result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- Do not apply through any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.
- This product cannot be used to formulate or reformulate any other pesticide product.

**Table 5. Crop-Specific Restrictions and Limitations**

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding*	Aircraft Application
Between Crop Applications**	5.6 pts.	8 pts.	Yes	Yes
Pasture, Hay Silage	4 pts.	8 pts.	Yes	Yes
Sugarcane	5.6 pts.	11.2 pts.	Yes	Yes
Sorghum	2.8 pts.	2.8 pts.	Yes	Yes
Wheat	2 pts.	3.33 pts.	Yes	Yes

\* Refer to “*FOOD/FEED CROP-SPECIFIC INFORMATION*” section for grazing and feeding restrictions.  
 \*\* Only labeled crops can be planted within 30 days of application. Limited to 2 applications per year. Minimum of 30 days between application

**FOOD/FEED CROP-SPECIFIC INFORMATION**

<b>FOOD/FEED CROP USES</b>
This product can be used on the following:
*Conservation Reserve Program Land
*Fallow Systems (Between Crop Applications)
Grain Sorghum
Grass (Hay or Silage)
Pastures
Rangeland
Sugarcane
Wheat
See sections “ <i>RESTRICTIONS AND LIMITATIONS</i> ” and “ <i>APPLICATION INSTRUCTIONS</i> ”.
*These sites are considered to be Food/Feed uses only when harvested, grazed or foraged. Otherwise, they are considered to be Non-food/Feed uses.

**PASTURES, RANGELAND AND GRASS (Hay, Silage)**

This product is for use on pastures (including pasture grown for hay), rangeland and grass grown for hay or silage. If grass is to be cut for hay, Agricultural Use Restrictions for the Worker Protection Standard are applicable. Refer to **Tables 1 and 2** for rate selection based on targeted weed or brush species. Some weed species will require tank-mixes for adequate control.

For susceptible annual and biennial broadleaf weeds, do not exceed 2.8 pints of this product per acre per application. For moderately susceptible biennial and perennial broadleaf weeds and woody plants, do not exceed 5.6 pints per acre per application.

Retreatment may be made as needed (maximum of 2 applications per year). Allow a minimum of 30 days between applications. Do not exceed a total of 8 pints of this product per treated acre during a growing season.

Rates above 4 pints of this product per acre per application are for spot treatments only. Do not exceed 5.6 pints of this product per acre per application or a maximum of 11.2 pints per acre per year for spot treatments. Minimum of 30 days between application. Maximum of 2 applications per year.

Uses described in this section also pertain to small grains (such as Barley, Corn, Forage sorghum, Oats, Rye, Sudangrass or Wheat) grown for pasture, hay and silage only. Newly seeded areas, including small grains grown for pasture or hay, may be injured if rates greater than 2 pints of this product per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass and Stargrasses (*Cynodon* spp.), use 2 to 4 pints of this product per acre to control or suppress weeds after planting vegetative propagules (stolons) of hybrid Bermudagrasses. In addition to the weeds listed in **Tables 1 and 2**, this rate of this product will control or suppress annual Sedges, Broadleaf signalgrass, Crabgrass and Goosegrass.

Best results will be obtained if this product is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7 to 10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1 inch in height before application or if germination of weeds occurs 10 days after application.

Do not use on Bentgrass, susceptible grass pastures (such as Carpetgrass, Buffalograss or St. Augustine grass), Lespedeza, Wild winter peas, Vetch, Clover and Alfalfa pastures as injury will occur. When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds and brush may require repeat applications.

For pasture renovations, wait 3 weeks per quart (2 pts.) of Dicamba 2,4-D used per acre before interseeding or injury may occur.

If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches the joint stage.

**Grazing and feeding non-lactating animals:** There is no waiting period between treatment and grazing for non-lactating animals. Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.

**Grazing and feeding lactating animals:** Do not graze lactating dairy animals within 7 days of treatment.

**Dry hay and silage:** Treated grasses may be harvested for dry hay or silage but do not harvest within 37 days of treatment.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed a combined total of 4 pounds of a.e. per acre per year.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank-mixing with products containing Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

## SORGHUM

### **Rates and Timings**

Apply no more than 2.8 pints of this product per acre to Sorghum in the 3 to 5 leaf stage (4 to 8" tall). For best performance, apply this product when weeds are small (less than 3" tall).

Applications of this product to Sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days. Sorghum growing under conditions of stress such as high moisture, low fertility, and abnormal temperature may be more sensitive to applications of this product.

Do not use surfactants or oils with post-emergence applications of this product on Sorghum crops.

Do not use this product if the potential for Sorghum injury is not acceptable.

Do apply within 30 days of harvest.

Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.

Do not apply this product to Sorghum grown for seed production.

Make no more than one post-emergence application per growing season. Maximum of 2.8 pints per acre per application.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed a combined total of 1 pound of a.e. per acre per year.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank-mixing with products containing Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

## SUGARCANE

Applications of this product can be made any time after the weeds have emerged and are actively growing but prior to the close-in stage of Sugarcane. When possible, direct the spray beneath the Sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage. Application rates and timing are given below. Use the higher level of listed rate ranges when treating dense vegetative growth. Do not harvest cane prior to crop maturity.

### Rate

- Pre-emergence: Limited to one application per crop cycle. Maximum of 5.6 pints per acre per application.
- Post-emergence: Limited to one application per crop cycle. Maximum of 5.6 pints per acre per application
- Do not apply more than 11.2 pints of this product per acre per crop cycle.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed a combined total of 4 pounds of a.e. per acre per year.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank-mixing with products containing Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

## WHEAT (Fall and Spring Seeded)

If small Grains are grown for pasture or hay, refer to the section "*PASTURES, RANGELAND AND GRASS (HAY, SILAGE)*".

Do not graze or harvest for livestock feed prior to crop maturity.

The pre-harvest interval (PHI) is 14 days.

Limited to 4.8 pints per acre per crop cycle.

Post-emergence: Limited to one post-emergence application per crop cycle. Maximum of 3.4 pints per acre per application.

Pre-harvest: Limited to one pre-harvest application per crop cycle. Maximum of 1.4 pints per acre per application.

Do not use this product in Wheat underseeded with Legumes.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed the combined total of 1.25 pounds of a.e. per acre per crop cycle of 2,4-D for post-emergent use. For pre-harvest application, do not exceed 0.5 pound of 2,4-D a.e. per crop cycle. Do not exceed a total of 1.75 pounds of 2,4-D a.e. per acre per crop cycle for all uses.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank-mixing with products containing Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

### EARLY SEASON APPLICATIONS

Apply 0.5 to 1 pint of this product per acre to Wheat unless using one of the Wheat specific programs below. Early season applications to Spring seeded Wheat must be made after tillering and before Wheat reaches the 6 leaf stage. Early season applications to Fall seeded Wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing Wheat varieties such as TAM 107, Madison, or Wakefield to be certain that the application occurs prior to the jointing stage. A limit of one post-emergence application may be made per crop cycle.

### SPECIFIC USE PROGRAMS FOR FALL SEEDED WHEAT ONLY

Up to 1.33 pints of this product per acre may be applied for Fall seeded Wheat after the Wheat begins to tiller for suppression of perennial weeds, such as Field bindweed. Applications may be made in the Fall following a frost before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For Fall applications only, do not use if the potential for crop injury is not acceptable.

This product may be applied in tank-mixes with herbicides labeled for use on Fall seeded Wheat. Follow all directions for use and restrictions in all products involved in tank-mixing.

#### **PRE-HARVEST APPLICATIONS**

This product can be used to control weeds that may interfere with harvest of Wheat. Apply up to 1.4 pints of this product per acre as a broadcast or spot treatment to annual broadleaf weeds when Wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. A limit of one pre-harvest application may be made per crop cycle. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy. A waiting interval of 14 days is required before harvest. Do not use pre-harvest treated Wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better. For control of additional broadleaf weeds or grasses, this product may be tank-mixed with other herbicides such as Ally or Roundup® Ultra that are registered for pre-harvest use in Wheat. Pre-harvest use of this product is not registered for use in California.

#### **BETWEEN CROP APPLICATIONS, CONSERVATION RESERVE PROGRAMS, GENERAL FARMSTEAD AND FALLOW**

These uses are considered Food/Feed Crops when harvested, grazed or foraged. Consult the “*ADDITIVES*” section for adjuvant restrictions and the “*NON-FOOD/FEED USE*” section below for specific use directions.

#### **NON-FOOD/FEED USE**

##### **(Land not Harvested, Grazed or Foraged) Specific Information**

##### **BETWEEN CROP APPLICATIONS**

##### **PRE-PLANT DIRECTIONS (POST-HARVEST, FALLOW, CROP STUBBLE, SET ASIDE) FOR BROADLEAF WEED CONTROL**

This product may be applied pre-plant for the control or suppression of broadleaf weeds in a “pre-plant burn down program”. Rates of 0.5 to 5.6 pints may be applied pre-plant alone or in tank-mix with Glyphosate, Touchdown, Paraquat, or other products labeled for pre-plant burn down.

This product can be applied either post-harvest in the Fall, Spring or Summer during the fallow period or to crop stubble/set-aside acres. Apply this product as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (post-harvest) before a killing frost or in the fallow cropland or crop stubble the following Spring or Summer.

Only labeled crops can be planted within 30 days of application. Limited to 2 applications per year. Minimum of 30 days between applications.

See “*Crop Rotational Restrictions*” in the “*RESTRICTIONS AND LIMITATIONS*” section for the specified interval between application and planting to prevent crop injury.

##### **Rates and Timings**

Apply 0.5 to 5.6 pints of this product per acre. Refer to **Table 1** to determine use rates for specific targeted weed species. Retreatments may be made as needed; however, do not exceed a total of 8 pints of this product per treated acre during a growing season. For best performance, apply this product when annual weeds are less than 6 inches tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late Summer or Fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if this product is applied when the majority of weeds have at least 4 to 6 inches of regrowth or for weeds such as Field bindweed and Hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for this product. For seedling control, a follow-up program or other cultural practices could be instituted.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed the combined total of 4 pounds of a.e. per acre per year.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank mixing with products containing Dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

## CONSERVATION RESERVE PROGRAMS AND GENERAL FARMSTEAD

This product is for use for Conservation Reserve Programs, general farmstead (non-cropland only), weed and brush control or use in State Recognized Noxious Weed areas (non-cropland areas). Refer to **Tables 1 and 2** for rate selection based on targeted weed or brush species. Some weed species will require tank-mixes for adequate control.

For post-emergence control of annual and perennial weeds, a limit of two applications per year can be made with a maximum of 5.6 pints per acre per application and a minimum of 30 days between applications.

For post-emergence control of woody plants, a limit of one application per year can be made with a maximum of 11.2 pints per acre per year.

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sales or other commercial use or for commercial seed production, or for research purposes.

For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

This product contains 0.36 pounds a.e. of 2,4-D per pint. When tank-mixing with products containing 2,4-D, do not exceed a combined total of 4 pounds of a.e. per acre per year.

This product contains 0.125 pounds a.e. of Dicamba per pint. When tank-mixing with products containing Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

## FARMSTEAD AND FENCEROW TREATMENT APPLICATION INSTRUCTIONS

This product may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in **Tables 1 and 2**, these treatments may be used to control or suppress woody plant species listed in **Table 6**.

To prepare oil and water emulsions, mix in the order and proportions indicated below.

The solution should remain milky colored without an oily layer on top when under agitation. If an oily layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

Do not exceed 40 gallons of spray solution per treated acre per application. Forty gallons of spray solution contains 1.0 pound acid equivalent of Dicamba and 2.87 pounds acid equivalent of 2,4-D. Spray plants to wet. Do not allow this spray mix to contact desirable vegetation. To control brush, briars and weeds along fencerows surrounding pasture and ranch lands, and fallow fields, use a tank-mix of 2.5% of this product, 87.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank-mix will damage or kill desirable grasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

This product contains 0.36 pound a.e. of 2,4-D per pint. When tank-mixing with products that contain 2,4-D, do not exceed a combined total of 4 pounds of a.e. per acre per year.

This product contains 0.125 pound a.e. of Dicamba per pint. When tank-mixing with products that contain Dicamba, do not exceed a combined total of 1 pound of a.e. per acre per application.

- 1) **Water** – Begin by agitating a thoroughly clean spray tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2) **Emulsifier** – Add 0.5% volume to volume.
- 3) **This product** – Add 2.5 gallons per 100 gallons of total intended solution (maximum 22 pints of this product per 100 gallons of spray solution)
- 4) **Diesel oil** – Add 10 gallons per 100 gallons of total intended solution.
- 5) Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If an oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

## FOR SPRAYING FOLIAR APPLICATIONS

1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
2. Spray individual plants to wet with handgun.
3. For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at sod surface in addition to wetting the foliage.
4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation

**FOR DORMANT BASAL APPLICATIONS**

1. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
2. Spray in late Winter or early Spring before plants break dormancy.
3. Spray the bottom 24 inches of the target stem to wet on all sides.
4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

**FOR CUT SURFACE TREATMENTS**

Apply this product in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- **Frill or Girdle Treatments:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with this product.
- **Stump Treatments:** Spray or paint freshly cut surface with this product. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

Limit to one basal spray or cut surface application per year.

Maximum of 22 pints per 100 gallons of spray solution.

**Table 6. The following list of trees and vines can be controlled on Farmsteads and Fencerows as foliar, basal or cut surface treatments:**

Alder	Honey locust	Rose, Multi-floral
Ash	Honeysuckle	Sagebrush, Fringe
Aspen	Hornbeam	Sassafras
Basswood	Huckleberry	Spruce
Beech	Huisache	Sumac
Blackberry	Ivy, Poison	Sweet gum
Black gum	Kudzu	Sycamore
Cedar	Locust, Black	Tarbush
Cherry	Maple	Willow
Chinquapin	Mesquite	Witch hazel
Cottonwood	Oak	Yaupon
Creosote bush	Oak, Poison	Yucca
Dewberry	Olive, Russian	
Dogwood	Persimmon, Eastern	
Elm	Pine	
Grape	Plum, Sand	
Greenbriar	Poplar	
Hawthorn (Thorn apple)	Rabbitbrush	
Hemlock	Red cedar, Eastern	
Hickory	Rose, McCartney	

## Weeds Listed in This Label

Common Name	Scientific Name
<b>ANNUALS</b>	
Beebalm, Spotted	<i>Monarda punctata</i>
Broomweed, Common	<i>Gutierrezia dracunculoides</i>
Buckwheat, Wild	<i>Polygonum convolvulus</i>
Buffalo bur	<i>Solanum rostratum</i>
Burdock	<i>Arctium</i> spp.
Buttercup, Corn	<i>Ranunculus arvensis</i>
Chickweed, Common	<i>Stellaria media</i>
Cockle, Corn	<i>Agrostemma githago</i>
Cocklebur, Common	<i>Xanthium strumarium</i>
Coreopsis, Plains	<i>Coreopsis tinctoria</i>
Croton, Woolly	<i>Croton capitatus</i>
Devils claw	<i>Proboscidea louisianica</i>
Dogfennel (Cypress weed)	<i>Eupatorium capillifolium</i>
Evening primrose, Cutleaf	<i>Oenothera laciniata</i>
Flax	<i>Linum catharticum</i>
Fleabane, Annual	<i>Erigeron annuus</i>
Flixweed	<i>Descurainia sophia</i>
Henbit	<i>Lamium amplexicaule</i>
Knotweed, Prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lettuce, Prickly	<i>Lactuca serriola</i>
Mallow, Common	<i>Malva neglecta</i>
Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Morningglory, Tall	<i>Ipomoea purpurea</i>
Mustard, Annual	<i>Brassica</i> spp.
Mustard, Tansy	<i>Descurainia pinnata</i>
Pennycress, Field	<i>Thlaspi arvense</i>
Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pigweed, Prostrate	<i>Amaranthus blitoides</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Pigweed, Tumble	<i>Amaranthus albus</i>
Poorjoe	<i>Diodia teres</i>
Purslane, Common	<i>Portulaca oleracea</i>
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Ragweed, Lance leaf	<i>Ambrosia bidentata</i>
Ragweed, Western	<i>Ambrosia psilostachya</i>
Sedge	<i>Cyperus compressus</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sneezeweed, Bitter	<i>Helenium amarum</i>
Sunflower, Common (Wild)	<i>Helianthus annuus</i>
Thistle, Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
<b>BIENNIALS AND PERENNIALS</b>	
Bindweed, Field	<i>Convolvulus arvensis</i>
Bittercress	<i>Cardamine</i> spp.
Buckeye	<i>Aesculus</i> spp.
Bullnettle	<i>Cnidioscolus stimulosus</i>
Chicory	<i>Cichorium intybus</i>
Clover, Hop	<i>Trifolium aureum</i>
Dandelion	<i>Taraxacum officinale</i>
Dock, Curly	<i>Rumex crispus</i>
Elderberry	<i>Sambucus canadensis</i>
Goldenrod, Missouri	<i>Solidago missouriensis</i>

(Continued)

(Continuation)

Goldenweed, Common	<i>Isocoma coronopifolia</i>
Groundsel	<i>Senecio vulgaris</i>
Honeysuckle, Hairy	<i>Lonicera</i>
Horsenettle	<i>Solanum carolinense</i>
Ivy, Poison	<i>Rhus radicans</i>
Knapweed, Black	<i>Centaurea nigra</i>
Knapweed, Russian	<i>Centaurea repens</i>
Knapweed, Spotted	<i>Centaurea maculosa</i>
Marshelder	<i>Iva annua</i>
Mesquite	<i>Prosopis juliflora</i>
Milkweed, Antelopehorn	<i>Asclepias</i>
Nightshade, Silverleaf	<i>Solanum elaeagnifolium</i>
Nightshade, Black	<i>Solanum nigrum</i>
Persimmon, Eastern	<i>Diospyros virginiana</i>
Rabbitbrush	<i>Chrysothamnus pulchellus</i>
Ragwort, Tansy	<i>Senecio jacobaea</i>
Redvine	<i>Brunnichia ovata</i>
Sagebrush, Fringed	<i>Artemisia frigida</i>
Smartweed, Swamp	<i>Polygonum coccineum</i>
Sorrel, Red (Sheep Sorrel)	<i>Rumex acetosella</i>
Sowthistle, Perennial	<i>Sonchus arvensis</i>
Spurge, Leafy	<i>Euphorbia esula</i>
Starthistle, Yellow	<i>Centaurea solstitialis</i>
Tallow Tree, Chinese	<i>Sapium sebiferum</i>
Thistle, Bull	<i>Cirsium vulgare</i>
Thistle, Canada	<i>Cirsium arvense</i>
Thistle, Musk	<i>Carduus nutans</i>
Thistle, Plumeless	<i>Carduus acanthoides</i>
Vetch	<i>Vicia</i> spp.
Yankee weed	<i>Eupatorium compositifolium</i>

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

**Nonrefillable Container (rigid material; less than 5 gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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**Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

**Refillable Container ( $\geq$  250 gallons & Bulk):** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, by other procedures approved by State and local authorities.

**SPILLS:** For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the CHEMTREC Emergency Response for decontamination procedures.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure or accident, call CHEMTREC 1-800-424-9300.

## WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

Manufactured By:



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